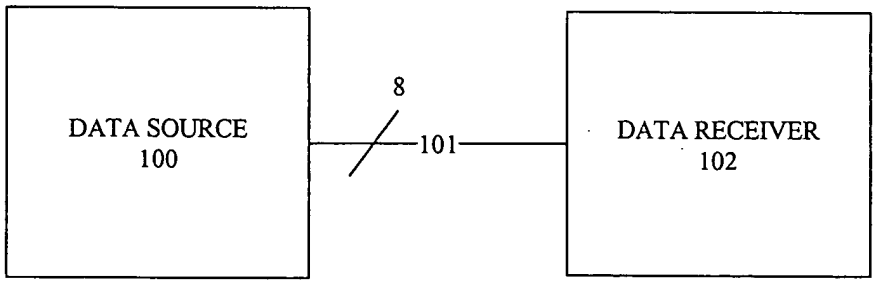


FIGURE 1 (PRIOR ART)

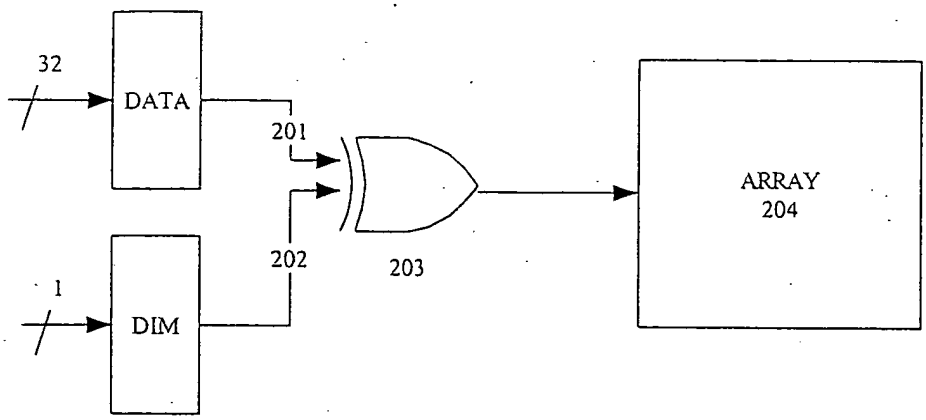


FIGURE 2

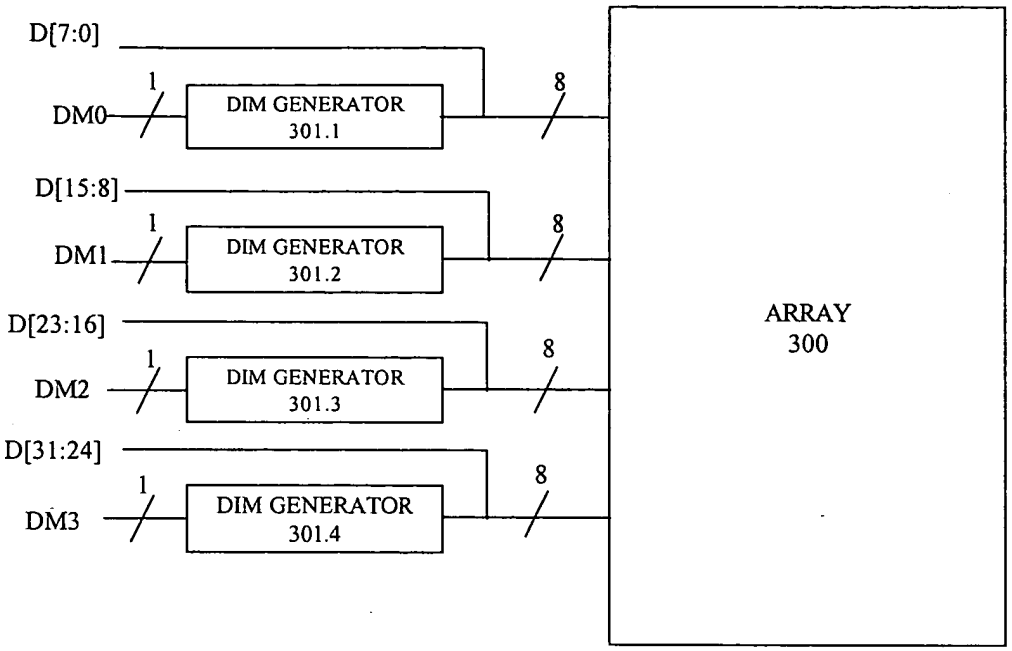

D[7:0]
DM0
1
DIM GENERATOR
301.1
8
D[15:8]
DM1
1
DIM GENERATOR
301.2
8
D[23:16]
DM2
1
DIM GENERATOR
301.3
8
D[31:24]
DM3
1
DIM GENERATOR
301.4
8
ARRAY
300

FIGURE 3

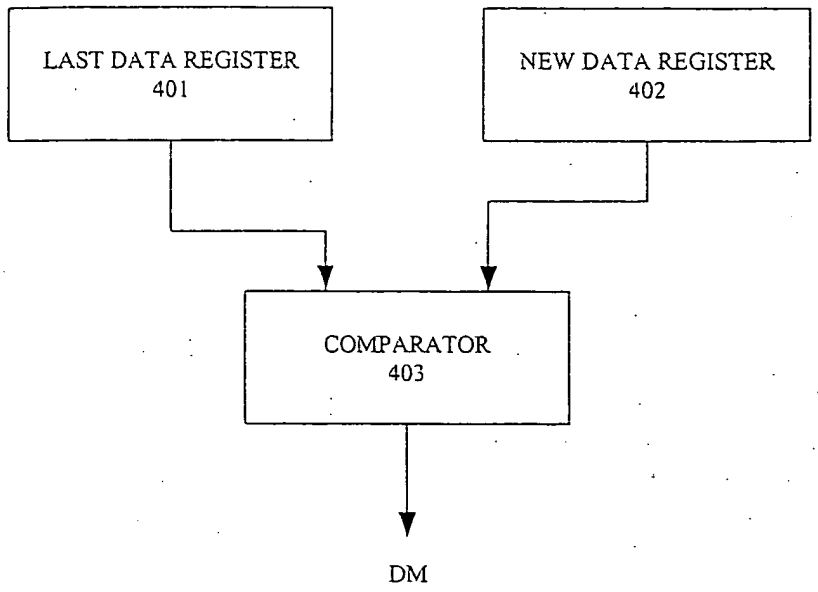

LAST DATA REGISTER
401
NEW DATA REGISTER
402
COMPARATOR
403
DM

FIGURE 4

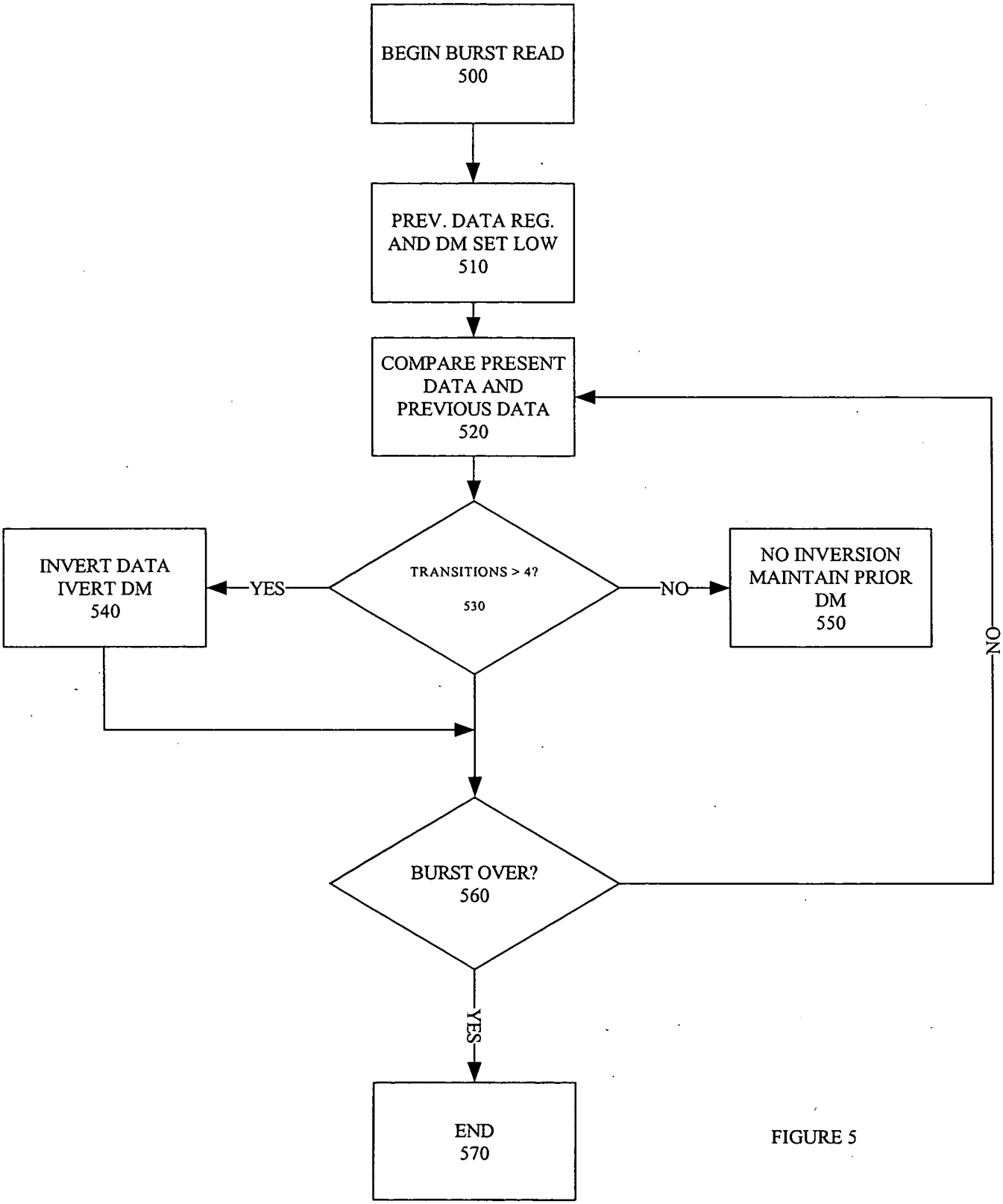

BEGIN BURST READ
500
PREV. DATA REG.
AND DM SET LOW
510
COMPARE PRESENT
DATA AND
PREVIOUS DATA
520
TRANSITIONS > 4?
530
YES
INVERT DATA
IVERT DM
540
NO
NO INVERSION
MAINTAIN PRIOR
DM
550
NO
BURST OVER?
560
YES
END
570

FIGURE 5

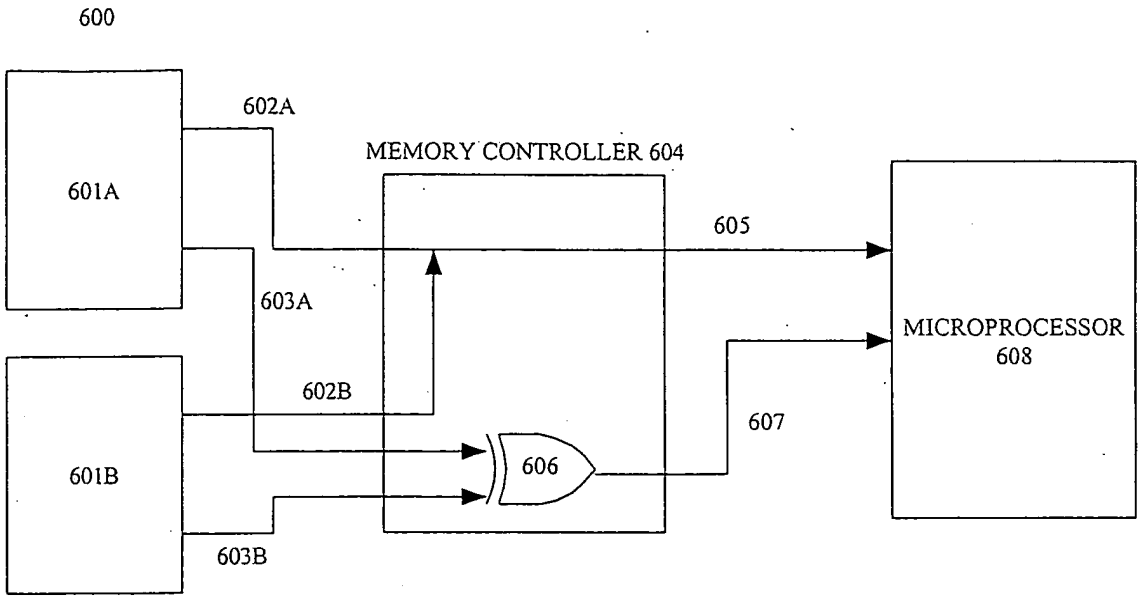
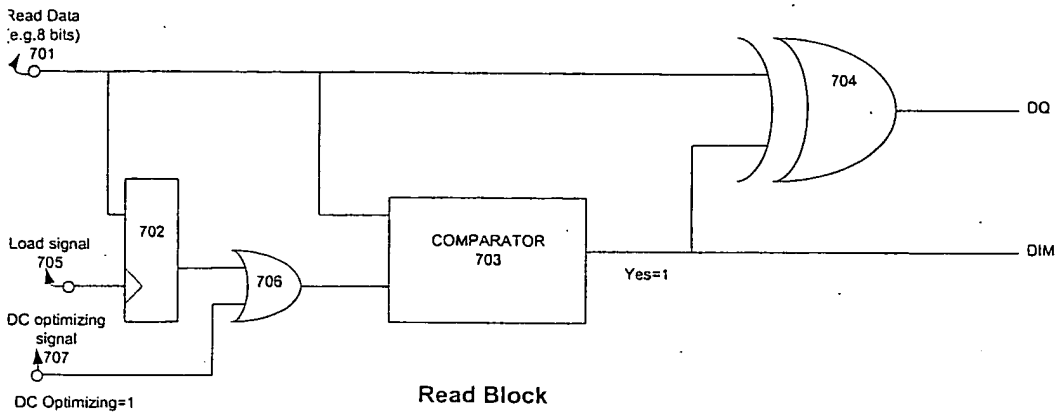
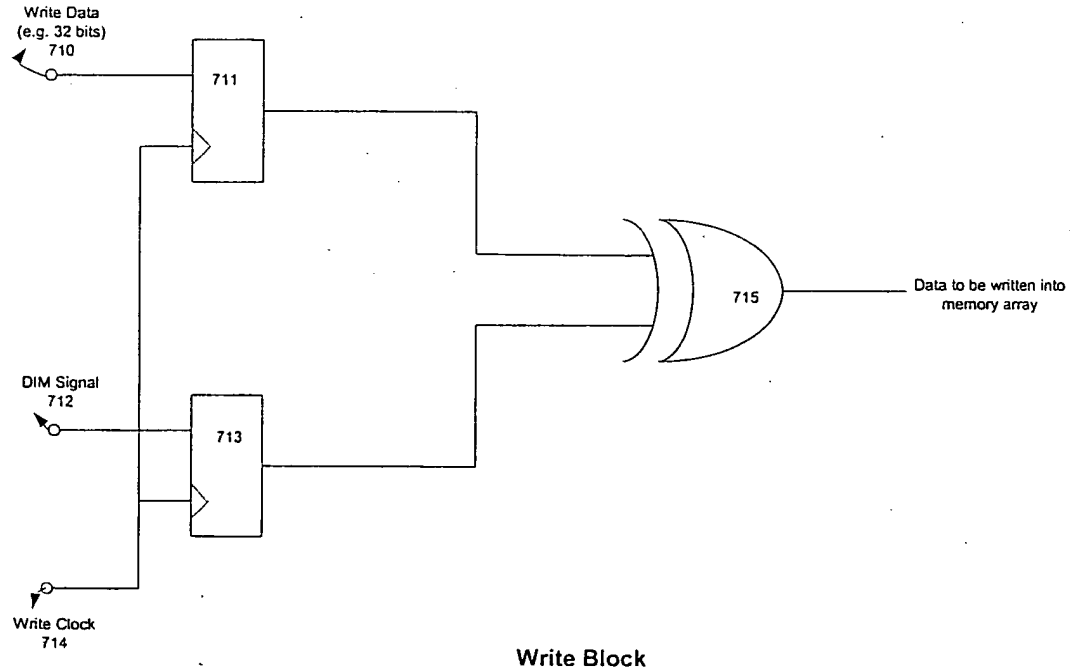

600
601A
602A
MEMORY CONTROLLER 604
605
603A
MICROPROCESSOR
608
602B
607
601B
606
603B

FIGURE 6



Read Block
Figure 7A



Write Block
Figure 7B